This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

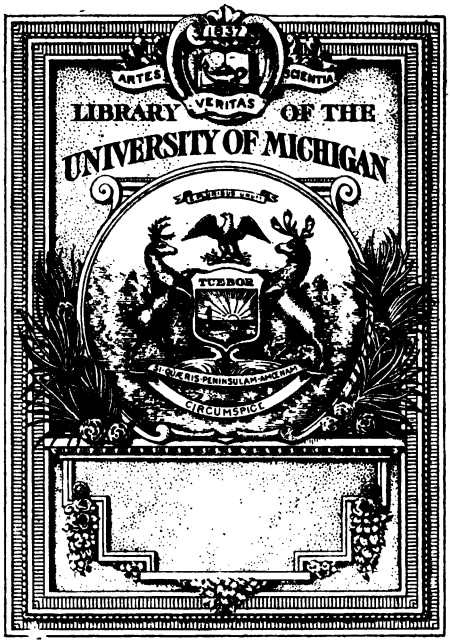
+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`



THE GIFT OF
Dr. James B. Angell

HE
4241
P85

MUNICIPAL OWNERSHIP

AT

HOME AND ABROAD

BY

ROBERT P. PORTER

NEW YORK
1898

MUNICIPAL OWNERSHIP

AT

HOME AND ABROAD.

By ROBERT P. PORTER.

WITH the growth of the modern city has come the extension of the street railway. The cities of antiquity and the municipalities of the Middle Ages were small in area compared with the great centers of commercial and industrial energy of the present times, and the population often compactly crowded within the narrow limits of stone walls, the massive gates of which were closed and barred at night. The conditions under which the population of these cities existed may be imagined by a study of the old quarters of many European cities of the present day, while the middle of the present century gave us in many of the industrial centers of England illustrations of insanitation, crowding, squalor, and wretchedness which could hardly find a counterpart either in the cities of antiquity or in the municipal activities of the Middle Ages. It is only of recent years, certainly within a generation, that there has

313624

sprung up all over the world an active endeavor to alleviate the condition of the congested populations of cities, and to distribute the people far beyond the old-time walls and boundaries. In this work the steam district and suburban railway played some part, and subsequently the street railway, propelled by horses and continuous cable; but the advent of the electric motor has made a revolution and brought into existence an instrument that is bound to take an active part in rebuilding the old-world cities, and making the broader and wider cities of our newer world more healthful and attractive to the masses of the people. The fact is, while we have been earnestly adjuring the boy to stick to the farm, and deploring the migration of population from the country to the cities, we have been as steadily adding to the attractions of city life. Not the least of these attractions is cheap and rapid transportation, which not only enables those who prefer to live in the suburbs and yet do business and enjoy the civilized arts of the city, but it enables those compelled to dwell within the cities to obtain change, amusement, and recreation by bringing the parks and gardens and pleasure resorts within easy access.

The modern street railway, in its stupendous extension, has not only opened its network of lines over the modern cities of the world, but of late years has invaded and brought about marvelous transformations in the oldest and most historic cities. In the ancient city of Kioto, Japan, which celebrated a few years ago the eleventh century of its existence, I was whisked on a modern tramway almost to the gates of

the palace which for centuries contained within its walls the Mikados of that old dynasty. Thus has the nation which arose in open rebellion at the appearance of the "Barbarian's Black Ship" calmly appropriated this latest invention of the Western world, and the whir of the trolley car has become common along the narrow streets of these hives of Asiatic industry. Street railways have been planned, or are at this moment actually transporting the tourist amid the orange-colored masonry of the Egyptian Pyramids, and we may yet hear of electric roads which will take the sightseer up one side of those massive piles of stone and down the other. Trolley wires have been strung amid the architectural splendors of bygone ages in Rome. There is a line crossing the ruin of the Capitol, while the ancient Roman Forum has become a junction for two street-car lines. The modern street railway connects Athens with the port of Piræus. The hills and hollows of Constantinople and Edinburgh have been bridged by cable cars, and old Budapest, on the Danube, once the point of attack for the infidel host advancing on Europe, has become the Mecca of peripatetic municipal committees studying the relative merits of street railway systems.

The great cities which became famous in the Middle Ages have been found willing to exchange the picturesque for the practical, and over many of the three hundred and seventy-eight bridges of Venice, celebrated for its situation, its palaces, and its works of art, the steel rails of the street railway have been laid. Genoa, Pisa, Milan, and Florence, all noted in mediæval history, have of late years inaugurated street

railway systems, and are all planning extension on the American plan. The famous towns of the United Kingdom, rich in historic and in literary memories, have been slower in adopting these innovations, and the mileage is comparatively small for the population and traffic. Still, there is hardly a city of consequence that has not the nucleus of a street railway or tramway, and the first quarter of the next century will witness a great extension of street railways in Great Britain. St. Petersburg, Moscow, Warsaw, and other large cities under the dominion of the Romanoffs, have admitted the practicability of this modern method of rapid transit, and the Czar's dominions will be a splendid field for these and kindred enterprises. In short, there is hardly a city of antiquity, a famous town, or an old historic place of the Old World that has not been invaded by the street railway, while all the modern manufacturing and commercial centers, no matter how remote from civilization, have installed either the American trolley car or the British tram car. No matter where you travel, nor whether you go in search of antiquities or adventures, the street railway is with you, and with you to stay.

The street railways of a large city come in contact with every inhabitant from one hundred and fifty to two hundred times every year, and for this reason the question of rapid transit is a topic in which all are interested. For example, the Greater London, with its six millions of population and network of suburban lines, metropolitan underground railways, tramways, and extensive omnibus systems, transports annually

over a thousand million human beings, and this is how it is done :

TRAFFIC OF LONDON.

	Passengers.
Ten main lines of railways convey in London	400,000,000
Metropolitan and Metropolitan District, North London, and other underground railways	150,000,000
Omnibuses	325,000,000
Tramways	225,000,000
Total traffic per annum	1,100,000,000

Greater New York, with half the population, and without figuring the millions that enter by railway, by ferry, and by steamboats, carries annually, relatively speaking, even a greater number of street railway passengers :

NEW YORK CITY.

	Passengers.
Elevated railways	183,000,000
Street surface railways	400,000,000
Total	583,000,000

BROOKLYN.

	Passengers.
Elevated railways	46,000,000
Street surface railways	200,000,000
Total	246,000,000
Grand total, New York City and Brooklyn	829,000,000

Add to this the ferry traffic and railways, and the traffic between New York and Jersey City, and we have close upon a thousand millions for the Western metropolis. Without counting passengers carried by the main lines of railways, and considering street conveyances, underground and elevated railways, and railways engaged purely in local traffic, the modern cities of London and New York handle annually an army of passengers exceeding in numbers the present entire population of the earth. The next cities in order of importance are Paris and Berlin, though their street railway and omnibus traffic combined is far behind that of New York. The latest report for Paris is as follows:

Compagnie Generale.	Passengers.
Tramways	95,355,591
Omnibuses	135,379,665
Steam motors	15,305,635
	246,040,891
Add for other tramways	54,000,000
Add for suburban railways	100,000,000
Making a round total of say	400,000,000
Cost per passenger from	3.50 to 3.75
Cost per passenger for Metropolitan Railway of New York	3.48

Wages in Paris about half what they are in New York.

The following figures are taken from the *Zeitung des Vereins*, in relation to the passenger traffic for 1895 and 1896 on the various lines of tramways and omnibuses in Berlin:

	1895.	1896.
Grosse Berliner Pferdebahn.	138,900,000	154,200,000
Metropolitan and Belt Line.	65,008,158	76,899,568
Berlin-Charlottenburg.....	6,998,555	7,476,573
Neue Berliner Pferdebahn ..	18,370,000	21,825,000
Steam Tramways, Bachstein & Co.....	3,527,274	3,358,263
Omnibus Co.....	37,414,505	43,452,646

The Siemens and Halske electric tramways, put in operation April 15, 1896, carried 3,835,894 passengers up to December 31st. The total number of passengers carried during 1896 is consequently 311,216,955, as against 270,049,481 in 1895, or an increase of 41,167,474. At the time of the last census, in December, 1895, the population of Berlin was 1,677,304 inhabitants.

Paris is adding to her street railway facilities, and a concession has just been granted for a new railway, to be run partly underground and partly on an elevated railway, which will pass entirely around the city and cross it both from north to south and from east to west. This concession has been made to a company for thirty-five years. Allowing for the natural increase in Paris and Berlin since 1896, the passenger traffic of the four great cities of the world in 1897 may thus be stated in round numbers:

	Passengers annually carried.
London	1,100,000,000
New York	830,000,000
Paris	450,000,000
Berlin	360,000,000
Total	2,740,000,000

This gives some idea of the magnitude of modern municipal traffic—a traffic which not only increases relatively with population, but at a greater ratio. In fact, I sometimes think it increases as the facilities improve, just as the consumption of commodities increases at a greater ratio as the price is reduced and quality improved.

The street railways of the United States in 1890, according to the census, carried more than four times as many passengers annually as the steam railways, and yet our steam railway system is equivalent to that of all the rest of the world put together. The street railways at home at the time of taking the Eleventh Census carried upward of two thousand millions of passengers. Since then the mileage has more than doubled, so if passengers have increased at a like ratio, the Twelfth Census may develop the astounding fact that four thousand millions of passengers were carried on the American street railways in the year that closes the century.

It fell to my lot to make the first official collection of street railway data in the United States, published in Volume IV. of the Tenth United States Census. A far more complete report was made under my direction for the Eleventh Census. In 1880 the street railway mileage of road in the United States, as

reported by the Tenth Census, was only 2,050. In 1890 the Eleventh Census gave the mileage of track at 8,123 miles. Estimates compiled by the *Street Railway Journal* for 1897 give the total track mileage of the country at 15,718 miles, an increase of nearly one hundred per cent. over the census figures of 1890. A later estimate gives the present mileage at over 16,000 miles, while the present rate of increase will in all probability find us at the close of the century with 20,000 miles of street railway track. The most notable change in this class of transportation has been the change from animal to traction motor, especially to electric. The changes in distribution of mileage by motive power between 1890 and 1897 have been as follows:

	1890 (*a*).	1897 (*b*).	Per cent. increase or decrease.
Animal	5,661	947	83.3 decr.
Electric	1,262	13,765	990.7 incr.
Cable	488	539	10.5 incr.
Miscellaneous	711	467	34. decr.
Total	8,123	15,718	93.5 incr.

(*a*) United States Census.
(*b*) *Street Railway Journal* reports.

The miscellaneous mileage is largely in elevated railways in the Eastern and Central States, and in steam-dummy lines in the Southern and Western States, Alabama especially having a number of dummy railways. Since the above table was compiled important changes from animal to mechanical power have taken

place in New York City, where we shall soon see the last of the horse car. The New York cable cars and the steam engines on the elevated railways are also doomed, and in a short time the entire mileage will be electric, unless the inauguration of a system of compressed-air cars now in progress of completion by the Metropolitan Railway Company should prove more economical than the underground trolley. The geographical distribution of street railways is important because it indicates how generally they have been adopted in all sections of the country. It is as follows:

Section.	1890.	1897.	Per cent. increase.
New England States.	916	2,151	134.8
Eastern States.....	2,393	5,220	118.1
Central States.....	2,554	4,980	95.0
Southern States.....	823	1,088	32.2
Western States.....	1,437	2,279	58.6
Total.....	8,123	15,718	93.5

The most recent available estimates show that the increase in capital invested in street railways has been something over 300 per cent. since the census year, and we may fairly put it at $1,600,000,000 for 1900, the present amount being in the neighborhood of $1,400,000,000. These facts give some idea of the growth and importance of the street railways at home. The statistics for foreign countries, with the exception of Great Britain, are not as satisfactory and complete as for the United States, though the less rapid growth in European countries makes it possible

to gauge the extent of these enterprises with tolerable accuracy, by using returns of a less recent date than those given above. The figures for the United States and Great Britain are for 1897. Those for France and Germany are for 1896, and in some of the countries the latest available data were for 1895. The table may therefore be regarded as approximately correct, and is probably as nearly a fair exhibit of the street railways of the principal countries of the world as it is possible to compile from the data attainable :

STREET RAILWAYS OF PRINCIPAL COUNTRIES OF EUROPE, AND UNITED STATES.

Country.	Population.	Total Mileage		No. Inhabitants to Mile of Track.
		of Lines.	of Tra'k.	
United States.....	72,000,000	10,000	16,000	4,500
Italy.....	30,500,000	1,719	1,865	16,354
Germany.....	52,000,000	1,065	1,497	34,736
United Kingdom...	38,000,000	1,031	1,505	25,249
France.....	38,000,000	1,024	1,295	29,343
Belgium	6,800,000	746	861	7,897
Austro-Hungary ...	44,000,000	326	453	97,130
Denmark.....	2,000,000	42	47	42,553
Spain.....	17,500,000	165	221	79,185
Holland.....	4,700,000	650	758	6,200
Portugal	5,000,000	76	89	56,179
Roumania	5,500,000	43	52	105,769
Russia	129,000,000	242	314	410,828
Sweden and Norway	6,900,000	33	38	181,758
Switzerland	2,900,000	177	203	14,285
Turkey	4,600,000	25	30	153,333
Total for Europe...	387,400,000	.....	9,228	.....

In view of the progress in street railway building in European countries during the last two years, and of the fact that the above table was compiled from complete and recent data so far as the United States and the United Kingdom are concerned, and that in most other cases the data used were not absolutely complete and were for 1895, it may for comparative purposes be safe to slightly increase the total track mileage of continental countries. It may be generally stated that at the present moment the United States operates about 16,000 miles of street railways, and Europe in the neighborhood of about 10,000 miles. Street railway mileage may thus be roundly compared to population :

	Population.	Street Railway Mileage.
Principal European Countries	400,000,000	10,000
United States	72,000,000	16,000

In the United States, therefore, for every 4,500 inhabitants we have one mile of track, while in Europe for every mile of street railway track there is a population of 40,000. This interesting fact, together with the details of the main table, which shows the number of inhabitants to each mile of street railway track in specific countries, should indicate to the American manufacturers of electrical railways the future fields for their ingenuity and enterprise. That America leads the world in this industry does not admit of a moment's doubt. The street railway, the motor car,

the tram car, the trolley car, the cable car, and all species of street locomotion having for their basis the steel rail, are indigenous to this side the Atlantic. In the earlier days of the art they were known abroad as "American railways," and in England denounced as a "Yankee innovation." That we now find American enterprise installing the latest devices in street railway transportation in all parts of the civilized—nay, all parts of the civilized and uncivilized world—is not a matter of surprise. While older communities, and especially those English cities and towns which, by municipal meddling, have side-tracked street railway enterprises, are discussing the relative merits of horse, electric, cable, compressed air, and gas propulsion, private enterprise in the United States has, at tremendous outlay, solved the problem, not only as to speed, but economy. The Town Council of Glasgow committed the blunder of inaugurating a horse railway system as late as 1895; Edinburgh is now installing a cable system, while at the present moment the London County Council are seriously discussing the installation of a horse street railway along the Thames embankment.

Politics, red tape, ignorance, timidity, opposing interests, and the deadly fear that private enterprise should make a dollar profit, have all helped in England, and to a lesser extent on the Continent, to retard the extension of street railways to meet the pressing demands of population. In America, however, private capital has had full swing, and with a courage almost akin to recklessness has not hesitated to discard, regardless of cost, one system of propulsion as

fast as a better offered. Whatever the sins of the American street-car man may be—and, like all the rest of humanity, he is far from perfection—he is up-to-date. He has planned his railway system on broad lines, including the districts that pay and the districts that must be run with a loss. He has gone ahead and taken his chances with the rest of the community, pinning his faith on the growth of the city and the increase of the suburban districts. He has not been contented to pick up the pennies within the city walls, but has boldly branched out in all directions, building up suburban districts where none existed, and increasing real estate values along the route. The American street railway man may have driven good bargains for himself, and directly he may not pay much into the coffers of municipalities as toll for the use of the streets, as his co-laborer beyond the Atlantic. Weighed, however, in the balance of good business and common sense, he can point to achievements which far outweigh the results attained in England, where municipal pettifogging has effectually soaked the enterprise out of street railways, and on the Continent, where private enterprise has only been allowed to go ahead after being enveloped in a sack of governmental restrictions. Instead of petty railway budgets, showing so much profit to the municipality, the American city can point to largely-increased real estate values, and millions added to the tax rolls, in a large measure the result of distributing the population of our cities beyond the boundaries far into the country districts. Look at the area of American cities compared with the larger cities of Europe. Without

cheap and rapid transit, all the recent extensions of the boundaries of our cities would have been impossible.

The American street railway man may therefore point with righteous pride to his track mileage, exceeding by 6,000 miles that of Europe, to the 4,000,000,000 passengers which he annually conveys to and from their homes, and to the fact that he has not waited for the population to come to him, but has gone out, true American fashion, in advance of population, and built up districts at great expense, which he now works with a profit, not alone to himself, but to the city whose revenue from taxes is thereby increased. On the question of charges, the American street railway compares favorably with similar systems abroad. In the first place, we have solved the question of a uniform fare, while nearly every municipality which I have visited in Europe is struggling, apparently hopelessly, with this question. Why? Because the municipality has not the courage of private enterprise. A uniform fare, it is contended, gives the longer haul an advantage over the shorter; so, to avoid this, in Glasgow the acme of absurdity has been reached by a one cent fare for a trifle over half a mile. It is far better for a man to walk half a mile than to ride anyhow, and quicker, it seems to me, after trying halfpenny fares on the newly inaugurated municipal horse tramways of the Scottish city, which social reformers claim has solved the true art of municipal government and municipally operated transit.

With their eyes bent on the puttering short haul, the street railways of the United Kingdom and, to a

lesser extent, of continental Europe, have failed to realize that it is the cheap long haul that relieves the congested spots of our great cities; that creates cheap homes; that carries the people into the suburban districts; and, lastly, that builds up new taxable areas, which ultimately give back to the city a hundred fold more than it would ever make trying to do for itself that which can be far better done by private ingenuity, economy, and enterprise. So Liverpool and London and Paris are all at this moment in their new street railway enterprises agitating the uniform fare question, as though it was something new and strange and wonderful. To the canny Scotch mind, however, in Glasgow, it seems a dreadful thing that one passenger should get a fifteen-mile ride for the same price paid by another passenger for the privilege of going one mile. I say fifteen miles, but on this point I may be corrected, because it was only the other day I was told that in New York City you can now ride for five cents along twenty-five miles of road and through territory which ten years ago would have cost you twenty-five cents and three hours' time. The efficacy of the American nickel, it is true, has helped us out; though with the elaborate systems of transfers inaugurated in the larger cities, the actual American fares can not be measured by five cents. In New York City the enterprising Metropolitan Railway Company have, during the last three years, increased their transfer system from thirty-two millions in 1896 to sixty-four millions in 1897, and over ninety millions in 1898, thereby reducing the average fare to less than three and a half cents, which, as I have shown, is less than

the average fares on the Paris tramways, less by more than a quarter of a cent than the average fares on the omnibus of Paris. In London, where the "Penny Bus" is so much in evidence that one would imagine they could get all over London for two cents, the mean rate per mile is nearly two cents—that is .92 of an English penny. The tramways of London charge over 1½ cents per mile, and the fares range, as do those of the omnibus, from two cents to twelve, according to distance.

These are actually carefully worked out figures. No American street railway company need be ashamed of these comparative results, but they speak volumes in favor of the economy of American private enterprise, when it is borne in mind that wages and salaries paid in America are double—in some cases more than double—those paid by these municipalized and governmentally controlled street railways of Europe. Even though these figures were less favorable to American enterprises, the argument in favor of the American system would be equally as strong. However well the principle of no more for the short haul than the long haul may work on the general railways, the principle of the same fare for the long as the short haul, or a uniform fare, is the true one for all intelligent street railway systems. It is a principle which, in the end, is not only certain to bring the greatest good to the greatest number, but ultimately the greatest revenue to the city and benefits to its inhabitants.

The rapid extension of street railways has been the means of bringing into existence so many other problems touching on the whole question of municipal gov-

ernment, that it is hardly possible to treat the street railway question without discussing at least some of the questions which the annual transportation of billions of human beings involves. Foremost among these questions is that of municipal ownership, which has been much discussed in this country of late, because of certain experiments now on trial in the United Kingdom. As I have just prepared my views on this whole question, soon to appear in the permanent form of what I hope may become a popular volume on the subject, I shall merely briefly summarize the results of an inquiry into this subject which I have undertaken, and in the course of which I visited all the principal cities of the United Kingdom and northern Europe. It is only fair to say that this inquiry was conducted without preconceived ideas on the subject, and is in no sense a brief for those interested in street railways. It has been aptly remarked by a well-known street railway man that the advocates of municipal ownership and operation have had the field virtually to themselves for several years, and that during that period they have drawn a pretty long bow, to use my own and not President Vreeland's language. Last winter I recall a friend of mine who had charge of some popular lecture at the Cooper Institute entreated me through the telephone to come down and take the "off" side of the question, not, as I suspect, on account of my ability to discuss the problem, but because, as he pathetically put it, "I can get a thousand people willing to take the other side." Yes, there are, no doubt, a thousand people "cocked and

primed" for the "other side;" but that does not prove the other side is right, nor even if it is right when applied to the English system of local government that it will apply equally well under the different conditions existing this side the Atlantic.

A proper understanding can only be reached after a careful study of the two systems of local government, and especially of the relations of central and local government in the two countries. The first essential, in my opinion, is to determine the position of the city correctly and definitely. If after this we shall find that in England—and in a greater degree on the Continent—the municipality is both an agent of the state and an organization for the satisfaction of local needs, may not some of these reformers have to begin their work all over again and become advocates of the great central power, such as that possessed in Germany? In that country state ownership of railways has, perhaps, met with a measure of success as a producer of governmental revenue, though not as a medium of quick, cheap, and efficient transportation, as in England and the United States, where the railways are in private hands. Yet Germany draws the line on street railways, and the future policy of that happy hunting ground of the advocates of state ownership and operation of profit-earning undertakings will be in the direction of private operation, with moderate municipal control. In support of this, let me call attention to the following paragraph in the report of the Massachusetts Special Committee appointed to investigate the relations between cities and towns and street railway companies:

"At the present time, the municipalization of the street railways is not accepted as by any means indisputably desirable in Great Britain, while in Germany it is regarded unfavorably. This last fact is the more noteworthy, as Germany has been the field in which State ownership and management of steam railroads has been developed to the fullest extent, and with results pronounced to be unquestionable, as well as most satisfactory. The grounds for this apparently illogical action and contradictory policy were, during the last summer, briefly set forth to a member of the committee by the highest German authority. They were purely practical. The State official referred to simply said that Germany had carried officialism as far as, in his judgment, it was prudent to go. The government employees tended always to increase; and there, as here, it was found that employment by the government signified much which did not at once appear. The line had to be drawn somewhere; and it was not considered expedient to add to the number already existing the numerous officials and employees of all the street railway systems in the Empire."

The member of the committee referred to in the report was the Hon. Charles Francis Adams of Boston, one of the clearest-headed and fairest-minded men we have in public life, and an expert in railway matters. I had several conferences last autumn with Mr. Adams on this subject, and found my own conclusions identical with his, after having independently gone over much the same ground. The fact is, we are not yet prepared for the German system of centralization in the United States, nor do I see in the English experiment in municipalization anything particularly attractive, either from the standpoint of service rendered, or pecuniary results to the municipalities. Let

me briefly summarize the facts which I have elsewhere treated in detail at some length. As I have already admitted, on their face some of the experiments in England in relation to municipal operation have been successful and others have not been. In discussing the general question the most difficult problem which we have to face is the line of demarcation where city operation should end and private enterprise begin. If this could be satisfactorily settled, then there would be little left to discuss. On this point there is a great diversity of opinion. Some people take the ground that all profit-making undertakings should be managed by private enterprise, under strict supervision of the municipalities, especially where the carrying on of such industries involves the use of streets, and is monopolistic in character. Some include gas and street railways, and draw the line on water, taking the ground that the city should control her water supply, but that gas and street railways, with proper municipal restrictions, are better managed by private enterprise.

In the three great municipal industries, namely, those of water supply, lighting, and street railways, England has made some experiments in municipal operation, though, of course, a large majority of these interests are still in the hands of private companies. I have prepared a brief statement of facts up to September, 1897, when I visited the cities mentioned below. The experience of England, up to that time, was practically confined to six towns, and the financial results may be thus summarized :

SUMMARY OF RESULTS OF MUNICIPALLY OPERATED STREET RAILWAYS IN THE UNITED KINGDOM UP TO THE END OF 1897. (*a*)

POPULATION AND LENGTH OF TRACK.

Name of City or Town.	Population, Census 1891.	Length of Track, Miles.
Glasgow	703,920	77
Huddersfield	100,463	22
Leeds	402,449	22
Sheffield	347,278	10
Plymouth	98,121	4
Blackpool	35,000 (*b*)	5
Total	1,687,231	140

(*a*) The street railways of Liverpool came into possession of the city about three months ago, but results so far are too meager to tabulate, and it is not included in these tables.

(*b*) Summer watering place like Asbury Park, probably 100,000 population in summer.

PASSENGERS AND CAPITAL INVESTED.

Name of City or Town.	No. of Passengers Carried per Annum.	Capital Expenditure.
Glasgow	100,000,000	$4,046,195
Huddersfield	4,308,289	700,000
Leeds	17,000,000 (*a*)	1,090,000
Sheffield	5,000,000	632,645
Plymouth	1,700,000	250,000
Blackpool	3,500,000 (*a*)	269,472
Total	131,508,289	$6,988,312

(*a*) Estimated.

MOTIVE POWER, DATE OF CITY ASSUMING OPERATION, RATE OF FARE.

Name of City or Town.	Motive Power.	Date of City Assuming Operation.	Rate of Fare, Cents.
Glasgow....	Horse	July 1, 1894	1 to 6
Huddersfield	Horse and steam	1882	2 to 6
Leeds	Horse, steam, and electric	1894	2 to 6
Sheffield....	Horse and steam	1896	2 to 6
Plymouth...	Horse	1892	2 to 6
Blackpool ..	Electric.....	1894	4

REVENUE AND EXPENDITURE.

Name of City or Town.	Revenue.	Expenditure.
Glasgow	$1,804,897	$1,393,210
Huddersfield	139,490	149,305
Leeds.....	312,555	285,476
Sheffield	(a)	(a)
Plymouth.....	37,615	42,565
Blackpool.....	48,027	45,140

(a) Detailed report for first year not available when I was in Sheffield.

SALARIES, PROFIT AND LOSS.

Name of City or Town.	Amount Paid in Salaries and Wages.	Profit and Loss.
Glasgow	$632,000	$43,798 (*a*)
Huddersfield	60,000 (*b*)	306,613 (*c*)
Leeds	75,000	27,079 (*d*)
Sheffield	———	40,000 (*e*) (*f*)
Plymouth	13,825	25,000 (*g*)
Blackpool	15,000 (*b*)	936 (*h*)

(*a*) Annual profit to the Common Good, $43,798.
(*b*) Estimated.
(*c*) Total deficiency, met by the rates.
(*d*) Profit to the city in 1897, after deducting sinking fund.
(*e*) Excess of receipts on year's operations.
(*f*) The old company paid the city $20,000, and the excess of receipts over expenditures here shown is not profit on full investment of $632,645, but on what the plant cost the city, namely, $133,828. The coming year we shall know more about this investment.
(*g*) Total deficit.
(*h*) Profit for year.

Having carefully studied the five exhibits given above, it will be seen that though they are separate tables, combined they form a nearly complete statement of the results of the street railway operation of these cities. Do these facts indicate that the English system is any better than the American system? It would seem to me, after an examination of the data attainable, that the history and details of the various

tramway enterprises in the United Kingdom are neither sufficiently extensive nor sufficiently satisfactory to point conclusively to any decision in favor of municipal operation of such undertakings. Similar enterprises, when leased to private companies, both in Manchester and Liverpool, show far better results financially to the municipalities than the examples given above.

Glasgow shows a profit of $43,798 to the city, with an equipment of $4,046,195 (in a horse car equipment put in during the last half of 1894), when an American firm stood ready to give the city a bonus of $250,000 and install an electric plant free of cost.

Huddersfield, in lamentable efforts to establish municipally operated railways, has muddled away $306,-613 in deficits, and has $700,000 invested in twenty-two miles of track.

Leeds, a city of over 400,000 population, with twenty-two miles of track, may be said to have done fairly well, because it has not run behind; but does any one in the United States believe a population of this size can really be served by twenty-two miles of street railway?

Sheffield is making a beginning and wisely feeling out after the best system. The excess of receipts for the first year is no indication of what Sheffield will do when she has installed a system of thirty-five miles. The private company paid $20,000 a year into the city treasury, and has paid off for the city much of the original investment in track. The city thus fell heir to the whole plant for a song, and naturally shows a profit the first year. Those in control in Sheffield are

in no sense prepared to underwrite municipal operation, at least until after an experience of ten years.

Plymouth, a small affair, is behind $25,000, while the operation in Blackpool last year yielded a profit to that city of $936.

Here we have the sum and substance of the municipally operated tramways in the United Kingdom up to date. For a more detailed statement of these experiments I respectfully refer those who care to carry the inquiry further to a statement which I made last December before the Massachusetts Committee, which was printed as part of the testimony.

As an offset to these cities, the attention of municipal ownership enthusiasts is respectfully invited to the city of Boston, population about the same as that of Glasgow, miles of street railway, 452; Brooklyn, population about the same as that of Sheffield, miles of street railway, 305; Baltimore, population about the same as that of Leeds, street railway mileage, 391; and lastly, if there is any city in the United States of 100,000 inhabitants not better supplied with rapid transit than Huddersfield and Leeds, or a seaside resort on the Jersey coast that cannot beat Blackpool ten to one, I should like to have our municipal operation friends name it. Here we have a population of 1,687,231 supplied with less miles of track than Washington, D. C., with a population of 250,000. Surely a study of the accompanying tables is not calculated to attract the business man, anxious for practical transportation, toward municipal operation as a means of developing rapid transit. And yet we have here positively all the bed-rock facts that can be given at the present time.

The rest remain imbedded in the imagination of those who talk so glibly of the "strides" municipal ownership and operation are making "on the other side, you know."

If these facts indicate anything, they clearly point out that the glowing accounts we have had of such experiments by returned American travelers from the other side are valueless when submitted to practical American tests. Not only are the statements of success and profits greatly exaggerated, but municipal ownership has not made anything like the headway in the United Kingdom which many would have us believe. Indeed, there is as much misapprehension in the United States on this point, as I have shown to exist, as to the extent of the experiments in operating street railways. Some accounts would seem to indicate that England has municipalized such undertakings as water, gas, electric lighting, and street railways to a much greater extent than the facts warrant. In reality, if an absolutely accurate comparison could be made between the United Kingdom and the United States, it is doubtful which of the two countries would lead in this respect. I refer, of course, to public service, with profit-earning possibilities. For example, should we consider the four important branches of service—the supply of water, gas, electric light, and street railways—together, it would be safe to say that honors in favor of the municipalization of these undertakings would be about equally divided in the two countries.

To those without practical experience in handling such vast undertakings, and who therefore cannot